

AMENDMENTS TO THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as shown below.

This listing of claims replaces all previous versions and listings of claims in the present application.

Listing of Claims

1. (Previously Presented) A filter which filters original image data, said original image data having original luminance data and color difference data, comprising:

a generating processor that generates first luminance data and second luminance data such that said original luminance data is separated into said first luminance data and said second luminance data according to a predetermined ratio, wherein said original image data undergoes a gamma correction using a first gamma curve so as to generate said first luminance data, and said original image data undergoes a second gamma correction using a second gamma curve so as to generate said second luminance data, said second gamma curve being different from said first gamma curve,

wherein said second gamma curve is selected from a stepwise series of predetermined resolutions, and

wherein said first gamma curve has a zero offset, and said second gamma curve has a non-zero offset;

a filtering processor that filters said second luminance data by a low-pass filter so as to transform said second luminance data into third luminance data while the first luminance data and the color difference data are not low-pass filtered; and

a synthesizing processor that synthesizes said first luminance data, said color difference data, and said third luminance data into synthesized image data, without synthesizing filtered color difference data,

wherein the third luminance data defines a blurred luminance image and the synthesized image data comprises a soft focus image in which the color balance of the original image data is preserved, and

wherein said second gamma curve is changed so as to change the extent of the soft focus of said soft focus image.

2. (Previously Presented) A filter according to claim 1, further comprising:

an image reduction processor which reduces an image resolution corresponding to said second luminance data before said filtering processor filters said second luminance data; and

an image restoration processor which restores the image resolution, which has been reduced by said image reduction processor, after said filtering processor filters said second luminance data.

3. (Previously Presented) A filter according to claim 2, further comprising:

a second filtering processor which filters said second luminance data which has been filtered by said filtering processor once already, after said image restoration processor restores said image resolution.

4. (Previously Presented) A filter according to claim 2, wherein said image resolution is selectable from a stepwise series of predetermined resolutions.

5. – 7. (Cancelled)

8. (Previously Presented) A filter according to claim 1, wherein said predetermined ratio is selected from a stepwise series of predetermined ratios.

9. (Cancelled)

10. (Previously Presented) A filter according to claim 8, further comprising:
an image reduction processor which reduces an image resolution corresponding to said second luminance data before said filtering processor filters said second luminance data; and
an image restoration processor which restores the image resolution, which has been reduced by said image reduction processor, after said filtering processor filters said second luminance data.

11. (Cancelled)

12. (Previously Presented) A filter according to claim 10, wherein at least one of said predetermined ratio and said image resolution is changed so as to change the extent of the soft focus of said soft focus image.

13. (Previously Presented) A digital camera which filters original image data, said original image data having original luminance data and color difference data, comprising:

a generating processor that generates first luminance data and second luminance data such that said original luminance data is separated into said first luminance data and said second luminance data according to a predetermined ratio, and that performs a first gamma correction on said original image data utilizing a first gamma curve so as to generate said first luminance data and performs a second gamma correction on said original image data using a second gamma curve so as to generate said second luminance data, said second gamma curve being different from said first gamma curve,

wherein said second gamma curve is selected from a stepwise series of predetermined resolutions, and

wherein said first gamma curve has a zero offset, and said second gamma curve has a non-zero offset;

a filtering processor that filters said second luminance data by a low-pass filter so as to transform said second luminance data into third luminance data while the first luminance data and the color difference data are not low-pass filtered; and

a synthesizing processor that synthesizes said first luminance data, said color difference data, and said third luminance data into synthesized image data, without synthesizing filtered color difference data,

wherein the third luminance data defines a blurred luminance image and the synthesized image data comprises a soft focus image in which the color balance of the original image data is preserved, and

wherein said second gamma curve is changed so as to change the extent of the soft focus of said soft focus image.

14. (Currently Amended) A filter processing method for filtering original image data, the original image data having original luminance data and color difference data, the method comprising:

generating first luminance data and second luminance data such that the original luminance data is separated into the first luminance data and the second luminance data according to a predetermined ratio, performing a first gamma correction on the original image data utilizing a first gamma curve so as to generate the first luminance data and performing a second gamma correction on the original image data using a second gamma curve so as to generate the second luminance data, the second gamma curve being different from the first gamma curve[[~]].

wherein said second gamma curve is selected from a stepwise series of predetermined resolutions, and

wherein said first gamma curve has a zero offset, and said second gamma curve has a non-zero offset;

low-pass filtering the second luminance data so as to transform the second luminance data into third luminance data without low-pass filtering of the first luminance data and the color difference data; and

synthesizing, by a processor, the first luminance data, the color difference data, and the third luminance data into synthesized image data, without synthesizing filtered color difference data,

wherein the third luminance data defines a blurred luminance image and the synthesized image data comprises a soft focus image in which the color balance of the original image data is preserved, and

wherein said second gamma curve is changed so as to change the extent of the soft focus of said soft focus image.

15. (Previously Presented) The digital camera according to claim 13, wherein said predetermined ratio is selected from a stepwise series of predetermined ratios.

16. (Previously Presented) The filter processing method according to claim 14, further comprising selecting the predetermined ratio from a stepwise series of predetermined ratios.

17. – 20. (Cancelled)

21. (Previously Presented) The filter processing method according to claim 14, further comprising reducing an image resolution corresponding to the second luminance data before the low pass filtering of the second luminance data and restoring the image resolution, which has been reduced, after the low pass filtering of the second luminance data.

22. (Previously Presented) The filter according to claim 13, further comprising:
an image reduction processor which reduces an image resolution corresponding to said second luminance data before said filtering processor filters said second luminance data; and
an image restoration processor which restores the image resolution, which has been reduced by said image reduction processor, after said filtering processor filters said second luminance data.

23. – 24. (Cancelled)

25. (Previously Presented) The filter according to claim 22, wherein at least one of said predetermined ratio and said image resolution is changed so as to change the extent of the soft focus of said soft focus image.

26. (Previously Presented) The filter processing method according to claim 21, wherein at least one of the predetermined ratio and the image resolution is changed so as to change the extent of the soft focus of the soft focus image.

27. – 29. (Cancelled)